

CLAIMS:

What is claimed is:

1. A method of determining a location of a portable data processing system, the method comprising:
 - 5 determining resources geographically proximate to the portable computer to generate a location syndrome;
 - comparing the location syndrome to a set of location profiles; and
 - responsive to sufficiently matching the location syndrome to one of the set of location profiles, returning, to another software component, a label corresponding to a
 - 10 matched one of the set of location profiles as a current location of the portable data processing system.
2. The method as recited in claim 1, wherein sufficiently matching the location syndrome to one of the set of location profiles comprises:
 - 15 assigning a score to each location profile wherein the score corresponds to the degree to which the location profile matched the location syndrome.
3. The method as recited in claim 2, wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:
 - storing unique location identification labels corresponding to the set of location profiles as a set of candidate locations;
 - 20 eliminating the unique location identification labels of the lower scoring location profiles to produce a revised set of candidate locations; and

identifying a best match from the revised set of candidate locations as the current location of the portable data processing system.

4. The method as recited in claim 3, wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

5 responsive to a determination that the score of one of the revised set of candidate locations with the highest score exceeds that score of other ones of the revised set of candidate locations by a specified margin and that the score of the one of the revised set of candidate locations exceeds a threshold value, identifying the one of the revised set of candidate locations with the highest score as the current location of the portable data
10 processing system.

5. The method as recited in claim 3, wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

responsive to a determination that the score of one of the revised set of candidate locations with the highest score does not exceed the score of other ones of the revised set
15 of candidate locations by a specified margin and that the scores of at least some of the others of the revised set of candidate locations exceed a threshold value, presenting at least some of the revised set of candidate locations to a user for user selection of the current location.

6. The method as recited in claim 1, wherein determining resources geographically
20 proximate to the portable computer comprises using a directory-based protocol.

7. The method as recited in claim 1, wherein determining resources geographically proximate to the portable computer comprises using at least one of a Dynamic Host configuration Protocol, a Service Discovery Protocol, and Jini.

8. The method as recited in claim 1, wherein determining resources geographically proximate comprises determining the latency between a message to interrogate a component and the arrival of the response.

9. The method as recited in claim 1, wherein determining resources geographically proximate comprises determining a route that a message to interrogate a component takes.

10. The method as recited in claim 1, wherein the resources include behaviors.

11. A computer program product in a computer readable media for use in a portable data processing system for determining a location of the portable data processing system, the computer program product comprising:

determining instructions for determining resources geographically proximate to the portable computer to generate a location syndrome;

15 comparing instructions for comparing the location syndrome to a set of location profiles; and

20 matching instructions, responsive to sufficiently matching the location syndrome to one of the set of location profiles, for returning, to another software component, a label corresponding to a matched one of the set of location profiles as a current location of the portable data processing system.

12. The computer program product as recited in claim 11, wherein sufficiently matching the location syndrome to one of the set of location profiles comprises:

scoring instructions for assigning a score to each location profile wherein the score corresponds to the degree to which the location profile matched the location syndrome.

13. The computer program product as recited in claim 12, wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

storing instructions for storing unique location identification labels corresponding to the set of location profiles as a set of candidate locations;

elimination instructions for eliminating the unique location identification labels of the lower scoring location profiles to produce a revised set of candidate locations; and

identifying instructions for identifying a best match from the revised set of candidate locations as the current location of the portable data processing system.

14. The computer program product as recited in claim 13, wherein the identifying instructions are first identifying instructions and wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

second identifying instructions, responsive to a determination that the score of one of the revised set of candidate locations with the highest score exceeds that score of other ones of the revised set of candidate locations by a specified margin and that the score of the one of the revised set of candidate locations exceeds a threshold value, for identifying the one of the revised set of candidate locations with the highest score as the current location of the portable data processing system.

15. The computer program product as recited in claim 13, wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

presenting instructions, responsive to a determination that the score of one of the revised set of candidate locations with the highest score does not exceed the score of
5 other ones of the revised set of candidate locations by a specified margin and that the scores of at least some of the others of the revised set of candidate locations exceed a threshold value, presenting at least some of the revised set of candidate locations to a user for user selection of the current location.

16. The computer program product as recited in claim 11, wherein determining
10 resources geographically proximate to the portable computer comprises using a directory-based protocol.

17. The computer program product as recited in claim 11, wherein determining resources geographically proximate to the portable computer comprises using at least one of a Dynamic Host configuration Protocol, a Service Discovery Protocol, and Jini.

18. The computer program product as recited in claim 11, wherein determining
15 resources geographically proximate comprises determining the latency between a message to interrogate a component and the arrival of the response.

19. The computer program product as recited in claim 11, wherein determining
20 resources geographically proximate comprises determining a route that a message to interrogate a component takes.

20. The computer program product as recited in claim 11, wherein the resources include behaviors.

21. A system for determining a location of the portable data processing system, the system comprising:

- 5 a location syndrome generator which determines resources geographically proximate to the portable computer to generate a location syndrome;
a comparator which compares the location syndrome to a set of location profiles;
and
a matcher which, responsive to sufficiently matching the location syndrome to one
10 of the set of location profiles, returns, to another software component, a label corresponding to a matched one of the set of location profiles as a current location of the portable data processing system.

22. The system as recited in claim 21, wherein sufficiently matching the location syndrome to one of the set of location profiles comprises:

- 15 a scorer which assigns a score to each location profile wherein the score corresponds to the degree to which the location profile matched the location syndrome.

23. The system as recited in claim 22, wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

- a storage unit which stores unique location identification labels corresponding to
20 the set of location profiles as a set of candidate locations;
an eliminator which eliminates the unique location identification labels of the lower scoring location profiles to produce a revised set of candidate locations; and

an identifier which identifies a best match from the revised set of candidate locations as the current location of the portable data processing system.

24. The system as recited in claim 23, wherein the identifier is a first identifier and wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

second identifier which, responsive to a determination that the score of one of the revised set of candidate locations with the highest score exceeds that score of other ones of the revised set of candidate locations by a specified margin and that the score of the one of the revised set of candidate locations exceeds a threshold value, identifies the one of the revised set of candidate locations with the highest score as the current location of the portable data processing system.

25. The system as recited in claim 23, wherein sufficiently matching the location syndrome to one of the set of location profiles further comprises:

a presentation unit which, responsive to a determination that the score of one of the revised set of candidate locations with the highest score does not exceed the score of other ones of the revised set of candidate locations by a specified margin and that the scores of at least some of the others of the revised set of candidate locations exceed a threshold value, presents at least some of the revised set of candidate locations to a user for user selection of the current location.

26. The system as recited in claim 21, wherein determining resources geographically proximate to the portable computer comprises using a directory-based protocol.

27. The system as recited in claim 21, wherein determining resources geographically proximate to the portable computer comprises using at least one of a Dynamic Host configuration Protocol, a Service Discovery Protocol, and Jini.

28. The system as recited in claim 21, wherein determining resources geographically proximate comprises determining the latency between a message to interrogate a component and the arrival of the response.

29. The system as recited in claim 21, wherein determining resources geographically proximate comprises determining a route that a message to interrogate a component takes.

30. The system as recited in claim 21, wherein:
the location syndrome generator determines behaviors of the data processing system and proximate network; and
the location profile includes a list of behaviors present at locations for which a location profile is available.